

## **ATTACHMENT J**

REDACTED VERSION

April 19, 2000

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SECTION 271  
COMPLIANCE MONITORING  
OF SOUTHWESTERN BELL  
TELEPHONE COMPANY  
OF TEXAS

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PUBLIC UTILITY COMMISSION  
OF TEXAS

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AFFIDAVIT OF NANCY REED KRABILL ON BEHALF OF  
NEXTLINK TEXAS, INC.

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**AFFIDAVIT OF NANCY REED KRABILL**

STATE OF TEXAS       )  
                                  )  
COUNTY OF DALLAS    )

I, Nancy Reed Krabill, being of lawful age and duly sworn upon my oath, do hereby depose and state as follows:

1. "My name is Nancy Reed Krabill. My title is Director, Regulatory and External Affairs for NEXTLINK Texas, Inc. My business address is 1300 W. Mockingbird Lane, Suite 200, Dallas, Texas 75247.

**PROFESSIONAL EXPERIENCE AND EDUCATIONAL BACKGROUND**

2. "My name is Nancy Reed Krabill. I am Director – Regulatory and External Affairs for NEXTLINK Texas, Inc. ("NEXTLINK"). I have served in that capacity for one and a half years and have spent over 13 years in the telecommunications industry, serving in various management positions in the operations and regulatory arenas. I received a Bachelor of Arts degree from Emory University in 1976, followed by a Master of Arts in Teaching degree from Emory in 1982, then a Masters of Business Administration degree from Emory in 1994.

**PURPOSE OF AFFIDAVIT**

3. "The purpose of my affidavit is to summarize the outcome of the data reconciliation process for Performance Measure 114 between SWBT and NEXLINK.

**RECONCILIATION OF PM 114: SWBT AND NEXTLINK TEXAS**

4. Pursuant to the Texas Public Utility Commission's request in Order No. 4 in Docket No. 20400, NEXTLINK-Texas Inc. ("NEXTLINK") and Southwestern Bell Telephone Company ("SWBT") representatives met by conference call, on April 12 and April 14, 2000, to reconcile existing discrepancies between SWBT and NEXTLINK data for Performance Measure ("PM") report 114 that addresses "Percent of Premature Disconnects." PM 114 measures the "percentage of coordinated cutovers where SWBT prematurely disconnects the customer prior to the scheduled conversion." A premature disconnect "occurs any time SWBT disconnects the CLEC customer prior to the CLEC authorization."<sup>1</sup>
  
5. During the course of these meetings, the parties examined data regarding SWBT's service performance for NEXTLINK for the months of December 1999, and January and February 2000. NEXTLINK and SWBT subsequently reached consensus on all but three outage occurrences. The table below summarizes the findings of the SWBT/NEXTLINK data reconciliation meetings:

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<sup>1</sup> SWBT Performance Measures Business Rules v.1.6.

Month	SWBT PM 114 Data	NEXTLINK Data	Resolution	Comments
December	** Customers affected; ** lines	** Customers affected; ** lines	Agreed that ** Customers affected; ** lines	NEXTLINK shows an additional ** lines for ** customer affected
January	** Customers affected; ** lines	** Customers affected; ** lines (** TN's)	** Customers affected; ** line (** TN's)	NEXTLINK shows ** additional customer and ** line affected
February	** Customers affected; ** lines	** customers affected; ** lines (** TN's)	Agreed that ** customers affected; ** lines (** TN's)	NEXTLINK shows ** additional customers and ** lines affected

\*\* Indicates Redacted Data

6. SWBT has accepted nearly all of NEXTLINK's reported data, except for five specific individual occurrences that remain in dispute. In two instances, SWBT did not agree to accept any NEXTLINK documented occurrences that did not include the name of a SWBT employee that was contacted to resolve the outage. SWBT also did not accept a reported outage that it believed did not fall within the parameters of the Commission's reporting measures. As defined in the business rules for PM 114, disconnects for LNP only and LNP with loop are captured, but there is no method for capturing data for situations in which a CLEC customer is disconnecting service from SWBT but is not porting numbers. This issue should be addressed by the Commission in its overall review of PM 114 (and related new measure PM 96). In another instance, SWBT agreed there was an outage, but captured it in March data, rather than February. And finally, an outage remained unreconciled due to a process issue: SWBT rejected an FOC to NEXTLINK, which NEXTLINK continued to

resubmit, believing the reject was in error, given that in the past, similar FOCs were accepted.

7. The chart, where applicable, shows outages both in terms of lines and TN's (Telephone Numbers). In January, one line went down that affected \*\*<sup>2</sup> stations, and in February, one line went down that affected \*\*<sup>3</sup> stations. NEXTLINK believes that where lines are used to show outages for premature disconnects, the actual TN's affected provides a clearer picture of actual customer impact.
8. These data reveal that SWBT failed to capture a significant amount of NEXTLINK outages. SWBT claims that the root cause of its reporting omissions result from a lack of communication between its Local Service Center ("LSC") and the LNP Outage Desk in the Local Operations Center ("LOC"). A SWBT escalation list provided on April 4, 2000 indicates that the LSC is the proper point of escalation for installation issues and that the LOC is the primary point of escalation for maintenance issues. The LNP Outage Desk is appropriately charged with reporting outages for performance measurement purposes, however, according to SWBT, the LSC was not reporting outages for performance measurement purposes to the LNP Outage Desk upon receipt of an escalation notice for a premature disconnect. SWBT claims that it has now corrected this problem by sending a "flash" informing LSC personnel to report the outages. Additionally, NEXTLINK was provided, during our April 12th discussion, with the 800 numbers of the LNP outage desk as an additional escalation point.

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<sup>2</sup> Confidential data redacted.

<sup>3</sup> Confidential data redacted.

9. Although SWBT maintains that its recent actions will, on a going forward basis, address previous reporting omissions, the reconciliation effort has reaffirmed NEXTLINK's concerns regarding SWBT's ability to accurately record performance data on a wider range of measurements. The PUC has requested an examination of PM 114.1 "Loop Disconnect/Cross Connect Interval" and PM 115 "Percent of SWBT-Delayed Coordinated Cutovers." NEXTLINK believes that the PUC should require SWBT to explain how the "lack of internal communication" impacts SWBT's ability to accurately capture reporting data for PMs 114.1 and 115." While NEXTLINK's data collection program does not currently capture incidents under PM 114.1 and 115, we believe that SWBT's internal communications problem between the LSC and the LNP outage desk, and SWBT's poor performance reflected in these measurements, calls into question the accuracy and reliability of SWBT's data submission for these specific performance measurements.<sup>4</sup> In addition, SWBT has failed to provide occurrences and benchmark/parity reporting data for the base number of occurrences that are below a certain threshold. Without such data, it is difficult for CLECs to properly determine whether SWBT is providing parity service.

10. A second problem raised during the data reconciliation session is the problem associated with the Telcordia software patch that caused premature disconnects during the month of February. SWBT disclosed this issue in its April 5 FCC 271 filing, yet it has failed to provide CLECs with a formal response addressing the root cause and resolution to this problem. While SWBT has discussed this issue with NEXTLINK on an informal basis,

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<sup>4</sup>For NEXTLINK-specific data, SWBT shows that it did not meet the benchmark in Dallas for January for PM 114.1 for Coordinated Hot Cuts for LNP with Loop. Similarly, SWBT did not meet the benchmark for PM 115a reflecting Coordinated Hot Cut activity in Dallas-Ft. Worth for LNP with Loop for both January and February. For PM 115b,

SWBT failed to issue an Accessible Letter or other formal means of communication to the CLEC community to take responsibility for any outages linked to the Telcordia software patch and acknowledge that the problem is not linked to CLEC error.

#### **NEXT STEPS**

11. The underlying raw data for SWBT's performance measurements is critical to determine whether CLECs are provided with parity service in the local telecommunications marketplace and whether SWBT is complying with the statutory 14 point checklist. The general numbers presented in the performance reports posted by SWBT are essentially meaningless without the ability for CLECs to "peel the onion" and analyze actual events captured within the performance measures. NEXTLINK has repeatedly asked SWBT for analysis of its raw data for the key measures that NEXTLINK currently captures within its own internal measurement process.
  
12. On January 10, 2000, NEXTLINK formally requested that SWBT provide underlying raw data for its NEXTLINK-specific performance reports. On February 14, 2000, SWBT finally provided data for its December 1999 data submission, and on February 22nd, provided the underlying data for its November 1999 reports. During a February 29th conference call, NEXTLINK requested that SWBT provide a detailed explanation of the raw data forwarded to NEXTLINK. NEXTLINK requested this information because column headings in SWBT's data submission failed to define the content of these data in each column. On March 21, 2000, SWBT finally informed NEXTLINK that there was no support currently

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Frame Due Time, in Dallas, SWBT did not meet the benchmark for LNP with Loop in February. Nor did it meet the benchmark in Houston for PM 115a for Coordinated Hot Cuts for LNP with Loop in February.



available in SWBT to explain the raw data. Moreover, on that same date, NEXTLINK sent its files showing premature disconnects to both SWBT LSC and LOC representatives, asking for resolution. Not until the PUC issued its April 5th order did SWBT provide data in a meaningful format and provide personnel to explain each occurrence and attempt to reconcile the data.

13. SWBT has now agreed to support raw data exchange with NEXTLINK. NEXTLINK, however, remains troubled by the fact that SWBT was unwilling to do so prior to direct PUC involvement. NEXTLINK believes that raw data analysis on disputed reporting measures should be performed and completed before SWBT is granted interLATA relief. Discrepancies in SWBT's data collection program, such as those outlined above, must be identified and solved. The PUC should require SWBT to implement a formal process that would allow CLECs, such as NEXTLINK, to submit data disputes to SWBT on a monthly basis and require that SWBT address and resolve underlying service problems in a prompt fashion.

14. Also, as mentioned in the preceding section, the Commission should examine the impact of lack of communication between the LSC and the LOC outage desk on PM's reported under 114.1 and 115. Further, PM 114 (and new PM 96) do not currently capture the scenario in which a customer disconnects service from SWBT but does not port numbers. Revisions to the PMs should be made so that service lost under those circumstances is captured.

15. Finally, SWBT should revise the data provided on the website to indicate the number of all data points for CLEC occurrences even when the base count of those data points falls below the initial threshold for Z-tests. This would make the data more useful to CLECs and help the CLECs to perform a “sanity check” on the reported data to determine whether the SWBT data matches the CLEC data.

**CONCLUSION**

16. Although NEXTLINK has found many individuals within the SWBT account management and data resolution teams to be extremely helpful, it appears that SWBT continues to promote an internal corporate policy designed to prevent normal interaction between our companies on certain key business matters, such as performance data tracking and resolution. Until SWBT decides to reverse course on this policy, CLECs will be forced to rely on state and federal regulators to ensure that a level competitive playing field exists in the Texas local telecommunications marketplace. SWBT’s monopoly-derived embedded customer base still constitutes a strategic advantage in the marketplace. As the PUC is aware, even facilities-based competitors who serve customers solely by means of their own facilities are subject to outage (as highlighted in PM 114) during the number porting process. Without ongoing PUC oversight, SWBT maintains the ability to use its position in the marketplace to harm competitors. NEXTLINK therefore urges the Texas PUC to continue its efforts to ensure the accuracy and reliability of SWBT performance data in order to continue the rapid development of competition in the local telecommunications market in Texas.

This concludes my affidavit.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on April 19, 2000

Nancy Reed Krabill  
Nancy Reed Krabill

STATE OF TEXAS  
COUNTY OF DALLAS



Subscribed and sworn to before me

This 19<sup>th</sup> day of April, 2000.

Laurel A. Diomampo  
Notary Public

## **ATTACHMENT K**

TRANSCRIPT OF PROCEEDINGS  
BEFORE THE  
THE PUBLIC UTILITY COMMISSION OF TEXAS  
AUSTIN, TEXAS

SECTION 271 COMPLIANCE ) PUC PROJECT NO.  
MONITORING OF SOUTHWESTERN BELL) 20400  
TELEPHONE COMPANY OF TEXAS )

WORKSHOP

MONDAY, APRIL 17, 2000

BE IT REMEMBERED THAT at 9:12 a.m. on  
Monday, the 17th day of April 2000, the above-  
entitled matter came on for hearing at the  
Offices of the Public Utility Commission of  
Texas, 1701 North Congress Avenue, 7th Floor,  
Commissioners Hearing Room, Austin, Texas  
78701, before DONNA NELSON and NARA SRINIVASA;  
and the following proceedings were reported by  
Aloma J. Kennedy, Kim Pence, and William  
Beardmore, Certified Shorthand Reporters of:

1 P R O C E E D I N G S

2 MONDAY, APRIL 17, 2000

3 (9:12 a.m.)

4 MS. NELSON: Okay. Let's go on  
5 the record in Project No. 20400, Section 271  
6 Compliance Monitoring of Southwestern Bell  
7 Telephone Company of Texas. Today we're going  
8 to be covering OSS issues as well as recent  
9 performance under Tier 2 measurements. And at  
10 3 o'clock, we're going to move to coordinated  
11 hot cuts frame due time issues for probably  
12 about an hour or an hour and a half. Whether or  
13 not we end at that point in the day for OSS  
14 depends on how far we get through the issues.

15 Initially, our thought is that we're  
16 going to address the issue of integration before  
17 we take up the proposed new measures. And I'm  
18 wondering if that's the most efficient way to do  
19 it. If any of the parties here disagree with  
20 that way of doing it, if you could let us know  
21 right now, that would be helpful.

22 Okay. Hearing no objections, that's  
23 how we'll proceed.

24 I would like to start by having  
25 Southwestern Bell outline on the record the

1 Thank you.

2 MS. NELSON: And what she offered  
3 for you to do for the group? (Laughter)

4 MS. De YOUNG: Sarah De Young, for  
5 AT&T. Yes. I prepared this four-page  
6 recommendation, learning out of the  
7 reconciliation, because it was my perception on  
8 Friday that you were looking for some sort of  
9 read-out.

10 I was trying to net out the learnings  
11 from this particular reconciliation of the hot  
12 cut measures. So if I could just go over those.  
13 I tried to group them in categories. The first  
14 group of issues were under the category  
15 "Performance Measure Data Integrity." And the  
16 first issue said that we found that manual  
17 summarization of the raw data results in errors  
18 in the reported data.

19 And you will remember we discussed this  
20 prior to the reconciliation on a conference call  
21 with Staff where we found discrepancies between  
22 the total number of orders and the total lines  
23 on our raw data versus what had been posted on  
24 the individual CLEC Web site.

25 And our recommendation to address that

1 issue is to mechanize the population of the Web  
2 site totals from the raw data. In other words,  
3 they should roll up and disaggregate down in a  
4 mechanized fashion. What we found as the root  
5 cause for the discrepancy was that the  
6 summarization of CLEC totals is being manually  
7 calculated and passed on to the performance  
8 measure Web site personnel, which has the  
9 potential -- and in this case it resulted in  
10 errors being posted to the Web site and --

11 MS. NELSON: Okay.

12 MS. De YOUNG: -- data that was  
13 discrepant between the Web site and the raw  
14 data.

15 MS. MURRAY: Your Honor, this is  
16 Kelly Murray. I was going to suggest, this is  
17 first time we've seen the document. I know  
18 we've been involved in the reconciliation with  
19 AT&T, but this is the first time we've seen it  
20 put out in this manner.

21 And my suggestion would be that maybe  
22 we just include this in the brief that we're  
23 going to be filing.

24 MS. NELSON: Well, I think that's  
25 a good idea, and also included in the



1 discussions, because I have a feeling that you  
2 can reach agreement on a lot of these issues.

3 MS. MURRAY: Yes. And if we can,  
4 we, of course, would put that into brief.

5 MS. NELSON: Right. And I would  
6 actually prefer that, too, since it's 4 o'clock  
7 now and we told the parties to be back here at  
8 4:00. I think that's a good solution to it.

9 MS. BOURIANOFF: Your Honor, if  
10 it's okay, since this is already prepared, we'll  
11 just go ahead and file it and not wait for  
12 April 28th, and then it can be teed up for the  
13 discussions that Southwestern Bell is having  
14 with the other CLECs, and AT&T, on different  
15 issues.

16 MS. MURRAY: Well, I guess I would  
17 just say that we don't have a reply to this  
18 document. We will have a brief in response. I  
19 guess we'd object to the filing.

20 MS. NELSON: Okay. I don't really  
21 see a problem with them filing except to the  
22 extent it encourages a big exchange of paper.  
23 To the extent you can work it off-line, I think  
24 I would prefer that.

25 MS. BOURIANOFF: Your Honor, my

1 only concern in going ahead and getting it filed  
2 is, these are learnings that AT&T has arrived at  
3 with Southwestern Bell.

4 We came and reported last Wednesday at  
5 the workshop about things we had learned with  
6 the reconciliation. I think some of the other  
7 parties on that Wednesday workshop were  
8 interested and it would have forwarded the  
9 discussion if they had had those learnings ahead  
10 of time.

11 That's part of what we are trying to  
12 respond to with this filing. We have learned  
13 stuff as a result of the reconciliation. There  
14 are going to be further calls with Southwestern  
15 Bell. I think it might forward those  
16 discussions if we make this available to the  
17 other CLECs in preparation of those calls.

18 MS. NELSON: Okay. Is there  
19 anything else that needs to be addressed today?  
20 Okay. If not, let's take a break right now for  
21 10 or 15 minutes, and then we'll come back and  
22 finish up OSS.

23 (Brief recess)

24 MS. NELSON: Okay. Let's go back  
25 on the record.

## **ATTACHMENT L**

## Relation of UNE-Loop Hot-Cut Failure Proportion to Hot-Cut Order Failure Proportion

### Theory

We begin by assuming that a measure for hot-cut performance by the ILEC is the percentage of hot-cut orders that are not completed as specified. Each order contains a, possibly different, number of UNE-loops that needs to be completed.<sup>1</sup> If any one of these UNE-loops within an order is missed then the whole order is declared as missed. The mandated benchmark for hot-cut failed *orders* is 5%. If more than 5% of hot-cut orders contain one or more loop hot-cut failures, ILEC performance for this measure is considered inadequate and remedies are generated.

What is the appropriate UNE-loop failure rate that corresponds to the 5% failed order rate?

To do this problem simply we make a number of assumptions:

- Each failed order is independent of all the others.
- Each failed UNE-loop is independent of all the others.
- The probability of UNE-loop failure is constant among orders within a month.
- The distribution of the number of UNE-loops per order is constant within a month.

Let  $P$  be the probability of order failure set equal to .05 (a 5% order failure rate), and let  $p$  be the corresponding probability of individual UNE-loop failure (UNE-loop failure rate).

Consider an order that contains  $n$  UNE-loops. Then the probability that this order contains one or more (up to  $n$ ) failed UNE-loops is given by

$$P_n = 1 - (1 - p)^n.$$

Although the UNE-loop hot-cut failure probability is constant, the probability that the  $n$ -loop order that contains it will also fail depends on the number of loops in that order. If we knew the probabilities of occurrence for each  $n$ -loop order, we could construct the overall probability of order failure by weighting each  $P_n$  by its corresponding probability of an  $n$ -loop order. Thus,

$$P = \sum_{n=0}^{\infty} q_n P_n = \sum_{n=0}^{\infty} q_n [1 - (1 - p)^n].$$

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<sup>1</sup> We assume that the measure is already appropriately disaggregated.

This quantity is the order failure rate for  $q_n$ , the probability of a  $n$ -loop order.<sup>2</sup> We ultimately set  $P$  equal to .05 and then may numerically solve for  $p$  (after determining the  $q_n$ ).

One way to get an accurate solution is to compute the fraction of orders that contain  $n$  UNE-loops for all values of  $n$  that occur in a month. This set of fractions will add up to unity, can be inserted in the sum above for the  $q_n$ , and allow for solutions for  $p$  in terms of  $P$ .

If the complete set of fractions is unknown or it is desired to approximate the results, with less detailed information regarding the distribution of  $n$ -loop orders, we may perform the following procedure.

If it is known or expected that the product  $np \ll 1$ , for each contributing  $n$ , then  $P$  can be approximated by

$$P \approx \bar{n}p - \frac{1}{2}(\overline{n^2} - \bar{n})p^2.$$

Here  $\bar{n}$  is the average number of UNE-loops per order and  $\overline{n^2}$  is the average of the square of the number of UNE-loops per order. This is a simple quadratic equation to solve for  $p$  in terms of  $P$  and the various number averages

If in addition,  $(\overline{n^2} / \bar{n})p \ll 1$ , then  $P$  may be further approximated by only the first term above.

$$P \approx \bar{n}p.$$

This is the approximation originally suggested by your staff. It is generally good if the number of UNE-loops per order is always close to the mean number of UNE-loops per order. Orders containing many more UNE-loops than the mean make this approximation poorer. It is an advantageous approximation for the CLECs because it tends to decrease the allowed UNE-loop misses for a given order failure rate. However, like the exact solution, the benchmark needs to change each month depending on the current value of the average number of UNE-loops per order. (This number changes monthly and is likely to continue this behavior.)

A final approximation ensues by assuming the average number of UNE-loops per order is a constant for all months.

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<sup>2</sup> The sum extends from 0 because we can then account for orders that have no UNE-loops but may need to be included. Terms in the sum with large  $n$  will tend to contribute vanishingly less than those with small  $n$ .

### Data Analysis

Assuming an order failure rate of 5% and monthly distributions for number of UNE-loops per order in the months of DEC99, JAN00, and FEB00, the following results were obtained using the combined CHC and FDT data from SWBT.

Month	Accurate $p$	Av loops/order	Approximate $p$	% error
DEC	0.023695	2.176230	0.022976	-3.04%
JAN	0.020010	2.578947	0.019388	-3.11%
FEB	0.023180	2.230337	0.022418	-3.28%

In this table the first column designates the month for that row. The second column gives the accurately calculated, according to the full sum, value of the required UNE-loop hot-cut failure rate that corresponds to a 5% order failure rate and the distribution of UNE-loops per order for each month. The middle column has the average number of UNE-loops per order for each month. The fourth column has the simple one-term approximate value for the UNE-loop failure rate corresponding to a 5% order failure rate. Note that for all three months the approximate rate is less (more stringent) than the accurate value. The last column has the percent error in the approximate UNE-loop failure rates compared to the accurate calculation. Note that a constant value of 2% would be in error at least by 18%.

To see if changes in the UNE-loops/order distribution would change the results, let us ask what if FEB00 had 1,2,...,or 10 additional orders each with 14 UNE-loops. The result is below.

Number of 14s	Accurate $p$	% error
0	0.023180	-3.28%
1	0.022578	-3.55%
2	0.022009	-3.78%
3	0.021471	-3.99%
4	0.020961	-4.16%
5	0.020478	-4.32%
6	0.020019	-4.45%
7	0.019582	-4.57%
8	0.019167	-4.67%
9	0.018772	-4.76%
10	0.018395	-4.84%

Thus, for example, if FEB00 had 10 additional orders each containing 14 UNE-loops, the accurate UNE-loop failure rate would be reduced by over 25% from its value with no 14 UNE-loop orders. Furthermore, the approximate UNE-loop failure rate becomes even more inaccurate than originally (favoring the CLEC even more). A constant value for the UNE-loop failure rate of 2% would have about a 15% error.

Lastly, we construct a similar table but this time including a number of orders with 100 loops each in the original FEB00 data.

Number of 100s	Accurate $p$	% error
0	0.023180	-3.28%
1	0.020953	-14.05%
2	0.018890	-20.19%
3	0.017012	-23.68%

Even with just a few 100 UNE-loop orders the accurate calculation differs from the approximate calculation by on the order of 20%. A constant value of 2% is similarly inaccurate.

### **Recommendations**

These data indicate that as a first choice, the accurate method be used each month to calculate the appropriate UNE-loop failure rate benchmark. Second choice would be to simply go with a constant value of 2%. Third choice would be to choose the approximate method. However, the third choice is always biased in favor of the CLECs.